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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

LEE, B

ART UNIT

PAPER NUMBER

2736

DATE MAILED:

09/22/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/338,744

Applicant(s)
White

Examiner
Benjamin C. Lee

Group Art Unit
2736

☒ Responsive to communication(s) filed on Jun 23, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 19-38 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 19-38 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

1. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2736.

Specification

2. The disclosure is objected to because of the following informalities:
on page 17, line 20, text is illegible due to spotty and insufficient ink.
--Appropriate correction is required.

New Matter

3. The amendment filed 6/23/99 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure (the current application is a continuation of 08/624,818 filed 3/27/96; therefore the amendment is not deemed as original disclosure even though it was filed with the current application). 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: **Claims 36-38** claimed moving to a first storage location to record a first GPS signal and moving to a second storage location to record a second GPS signal for comparison of the 2 signals to construct a map from the relative locations. However, the original disclosure only disclosed recording a GPS signal at a storage location and recording a GPS signal at a base station location to determine the relative locations of storage locations relative to the base station, which does not supported the claimed invention in question.

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Applicant is required to cancel the new matter in the reply to this Office action.

4. As a result of the above new matter objection, **claims 36-38** have not been further considered against prior art in the following section.

Claim Status

5. **Claims 19-38** are pending in the application.

Claim Rejections - 35 USC § 112

6. **Claims 26-27** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) In claim 26, line 1, "19" should have read --25-- in order to provide antecedent basis for "the bar code symbol" of line 1.

7. **Claims 36-38** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 36-38 recite limitations (see above objection to the specification for new matter" not disclosed in the specification.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 19-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Loomis et al.** (US pat. #5,563,607).

1) In considering claim 19:

a) **Loomis et al.** teaches article or location tagging in asset management, inventory management, logistics and asset tracking applications, or precise deployment of an asset at a selected location (col. 7, lines 5-25 and col. 8, lines 27-41) by determining the location at which an item is to be stored by recording a GPS signal received by a transceiver positioned at the location (col. 7, line 49-59); processing the GPS signal to determine the storage location (col. 7, line 60 to col. 8, line 17); determining the identity of the item from scanning a symbol associate with the item (inherent function of the bar-code reader connected to the GPS-equipped rover unit according to col. 7, lines 8-11 and 42-48 in view of the intended applications disclosed in col. 7, lines 5-25 and col. 8, lines 27-41);

except:

b) specifying the claimed storing items in a storage facility;

c) specifying claimed associating the storage location and identity in a database.

Loomis et al. teaches storing the identification data of an article tagged along with the error-corrected GPS location in an unspecified memory means (col. 7, lines 7-20) without specifying associating the storage location and identity in a database. However, since the GPS-equipped rover unit having the connected bar-code reader of **Loomis et al.** is for use in the

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applications of article or location tagging in asset management, inventory management, logistics and asset tracking, or precise deployment of an asset at a selected location type applications, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the storage location and the tagged article identity need to be associated in the memory means to enable look-up and retrieval functions of the above indicated applications, which memory means can be in the form of a database when the number of tagged articles is large.

Furthermore, the **Loomis et al.** method/system is for use in the applications of article or location tagging in asset management, inventory management, logistics and asset tracking, or precise deployment of an asset at a selected location type applications. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a system/method such as taught by **Loomis et al.** can specifically include the monitoring of the existence, location and status of items being stored in or transported to/from various storage locations including a warehouse and various other storage facilities.

2) In considering claims 20-21, **Loomis et al.** made obvious all of the claimed subject matter as in claim 19, including:

a) claimed wherein the storage facility is a warehouse is met by the consideration of claim 19 above;

except:

b) specifying the claimed wherein the items are stored in defined storage locations such as shelves or bins, or wherein the storage facility lacks defined storage locations.

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However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the method/system such as taught by **Loomis et al.** would have worked just the same whether the storage facility has or lacks defined storage locations such as shelves or bins.

3) In considering claims 22-24, **Loomis et al.** made obvious all of the claimed subject matter as in claim 19, except:

--the claimed wherein the storage facility is a retail store in which the items are stored on display racks or shelves, a rail yard in which freight rail cars are stored, or a ship yard.

However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the method/system such as taught by **Loomis et al.** for asset or inventory management in storage warehouse and other facilities would have worked just the same regardless of being applied to different storage facilities desired by a user including a retail store in which the items are stored on display racks or shelves, a rail yard in which freight rail cars are stored, or a ship yard.

4) In considering claim 25, **Loomis et al.** made obvious all of the claimed subject matter as in claim 19, including:

--the claimed wherein the symbol associated with the item is a bar code symbol is inherently met by the bar-code reader of **Loomis et al.** for obtaining the identification data of the item desired for monitoring.

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5) In considering claims 26-27, **Loomis et al.** made obvious all of the claimed subject matter as in claim 25, except:

--specifying whether the bar-code scanner is the claimed hand held type, wherein the scanning is done when the item is stored or when the item is removed from storage.

However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that choosing a hand held type bar code scanner in a method/system such as taught by **Loomis et al.** rather than a stationary one provides more convenience and flexibility for the operator to scan items of various sizes and shapes. Furthermore, since the system taught by **Loomis et al.** is for inventory purposes also, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the scanning would have been done when the item is stored as well as when the item is removed from storage.

6) In considering claims 28 & 30, **Loomis et al.** made obvious all of the claimed subject matter as in claim 19, including:

--the claimed wherein the GPS signal received by the transceiver is corrected to remove errors by comparing the GPS signal to a GPS signal received at a base station at a known location, wherein the location error is removed at a later time by recording the time at which the transceiver recorded the GPS signal and simultaneously recording another GPS signal at a base station of a known location so that correction factors derived from the GPS signal recorded at the base station is used to remove the location error for the transceiver at corresponding time (col. 3, lines 51-64; col. 7, lines 7-25 and col. 7, line 52 to col. 8, line 17).

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7) In considering claim 29, **Loomis et al.** made obvious all of the claimed subject matter as in claim 28, wherein:

--**Loomis et al.** disclosed the known method of location error removal in real time by establishing communication between the transceiver and the base station, but opted for a near real-time correction method in which a communication link having significant delays is suffice for its error correction purpose due to the recognized lack of a low latency, high speed (real-time) transmission link between the base station and the transceiver in some application environments (col. 2, line 33 to col. 3, line 64). However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that if the intended application environment for a system/method such as taught by **Loomis et al.** already has a high-speed communication link for the transceiver and the base station that enables real time or low latency position error correction, the real time method can be used and the time data and its corresponding time data recording and transmission hardware/software requirements need not be included to simplify the overall system and thereby reducing cost of the system.

6) In considering claim 31, **Loomis et al.** made obvious all of the claimed subject matter as in claim 19, wherein:

--while the bar code scanner is connected to the portable "rover" unit having the transceiver for recording the GPS signal according to col. 7, lines 42-65 of **Loomis et al.**, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the so connected rover unit and bar code scanner combination in the teaching of **Loomis et**

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al. can be considered a single portable unit and therefore constitutes a single portable device. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the rover unit and bar code scanner in the teaching of **Loomis et al.** can be made integral since they are meant to be functioning together.

7) In considering claim 32, **Loomis et al.** made obvious all of the claimed subject matter as in claim 19, plus the consideration of claims 25, 27-28 & 31.

8) In considering claims 33-34, **Loomis et al.** made obvious all of the claimed subject matter as in the consideration of claims 31 and 25 which incorporated the consideration of claim 19.

9) In considering claim 35, **Loomis et al.** made obvious all of the claimed subject matter as in claim 33, plus the consideration of claim 28.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Bunte et al., US pat. #5,873,070

--A similar data collection system having a bar code reader attached to a GPS positional device (col. 4, line 53 to col. 5, line 47 and col. 10, lines 46-52).

2) Fraker et al., US pat. #5,434,789

--A similar GPS relative positioning system.

11. Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label


"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

12. Any inquiry concerning this communication should be directed to Examiner Benjamin Lee at telephone number (703) 305-0412. The examiner can normally be reached on Monday-Friday, 6:30am-4:00pm. If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass, can be reached on (703) 305-4717.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-8576, Mon-Fri, 8:30am-5:00pm.

B.L.
September 18, 1999


BENJAMIN C. LEE
PATENT EXAMINER
GROUP: 2736